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10/687,675	10/17/2003	Branislav Meandzija	15685P210	9337

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EXAMINER	
PATEL, NIRAV B	

ART UNIT	PAPER NUMBER
2135	

MAIL DATE	DELIVERY MODE
11/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/687,675	MEANDZIJA ET AL.	
	Examiner	Art Unit	
	Nirav Patel	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 August 2007 (Amendment)*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's amendment filed on Aug. 27, 2007 has been entered. Claims 1-22 are pending. Claims 1, 11, 15, 18 are amended by the applicant.

2. The Office would like to notify the Applicant that there has been a change in Examiner to conduct the future examination and prosecution processes of the currently pending application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 6-8 and 10 are rejected under 35 U.S.C. 102(e) as being substantially anticipated by Hind et al. (US Patent No. 6,823,454).

As per claim 6, Hind teaches a method comprising:

authenticating a user terminal of a wireless access network by an access point of the wireless access network using an identity certificate signed by a certificate authority, the identity certificate being bound to user terminal hardware (col. 10, lines 8-25, taught the

device certificate using a globally-unique identifier for a particular device, see also, col. 3, lines 58-61).

As per claims 7 and 8, Hind teaches the method of claim 6, wherein the identity certificate being bound to user terminal hardware comprises the identity certificate including a serial number of the user terminal, wherein the serial number comprises a Media Access Control (MAC) address of the user terminal (col. 11, lines 46-54 and col. 6, lines 29-32, see also Fig. 1B and associated text).

As per claim 10, Hind teaches the method of claim 6, wherein the identity certificate is factory seeded into the user terminal (col. 10, lines 8-25, where creating device certificate using globally –unique device identifier for a particular device and storing the private key associated with the device certificate for a device in a non-removable protected storage attached to the physical device are taught).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hind et al (US Patent No. 6,980,660) in view of Mauro (US Patent No. 7,047,405) and in view of Steflk et al (US Patent No. 7,043,453).

As per claim 1, Hind teaches:

a receiver to receive an certificate from an access point of the wireless access network [Fig. 1B, col. 9 lines 43-49]; a memory to store an identity certificate signed by a certificate authority to be used by an access point of the wireless access network to authenticate the User terminal, the identity certificate being based, at least in part, on hardware included in the user terminal [Fig. 1B, 1C, col. 9 lines 49-55, col. 7 lines 58-64, Fig. 5B, col. 12 lines 29-37].

Mauro teaches: a transmitter to send a message to the access point after the user is authenticated [Fig. 7 – 742,744, col. 13 lines 57-62]. Further, Mauro teaches receiving a certificate from an access point [Fig. 7, 722].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Mauro with Hind, since one would have been motivated to provide secure transaction for a wireless communication devices [Mauro, col. 1 lines 60-62].

Mauro does not expressively mention a registration message.

Steflk teaches: a transmitter to send a registration message to the access point [Fig. 16, col. 27 lines 10-33].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Steflk with Hind and Mauro, since one would have been motivated to establish secure communication channel between devices using transaction protocol [Steflk, col. 4 lines 4-5].

As per claims 2 and 3, the rejection of claim 1 is incorporated and Hind teaches:
the user, wherein the identity certificate includes a serial number of the user terminal wherein the serial number comprises a Media Access Control (MAC) address of the user terminal [col. 7 lines 57-60].

As per claim 4, the rejection of claim 1 is incorporated and Hind teaches:
wherein the identity certificate is factory seeded into the memory of the user terminal [col. 13 lines 8-9].

As per claim 5, the rejection of claim 1 is incorporated and Hind teaches:
wherein the identity certificate authenticates the user terminal to multiple wireless access networks [col. 13 lines 9-41].

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hind (US Patent No. 6,823,454), and further in view of US 2004/0005878 to Olin et al. (hereinafter "Olin").

Hind does not teach wherein the identity certificate authenticates the user terminal to multiple wireless access networks and/or authenticating the user by an access point of a second wireless access network using the identity certificate.

However, in an analogous art, Olin teaches an access point for mobile devices with wireless communication capacity comprising communication means for establishing communications with at least one or more access points in order to form a network between at least access points (Abstract).

Olin teaches (paragraph 0041) teaches when a user of mobile device wants to connect to an access point, the identity of the user has first to be authenticated and that (paragraphs 0035-0036, Fig 1 and associated text) a mobile device connect to one of the access points with any type of wireless connection and that the mobile device connects to the first access point using wireless LAN. Then, the access point establishes a path to a gateway by tunneling using authorization protocols, such as certificates and digital signatures.

Therefore, it would have been obvious to one of ordinary skill in the art to modify the method and system of Hind with the teachings of Olin to allow authenticating the user of mobile device to multiple access points in order to form a private network and to enable mobile devices to establish connection to a gateway directly from one access point or indirectly through other access points of the access point network (paragraph 0009).

6. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hind et al (US Patent No. 6,980,660) in view of Mauro (US Patent No. 7,047,405) in view of Steflk et al (US Patent No. 7,043,453) and in view of Butt et al (US Patent No. 6,754,829).

As per claim 11, Hind teaches:

a receiver to receive an authenticator message from a user terminal capable of communicating with the wireless access network that is requesting access, the authenticator message including an identity certificate of the user terminal signed by a certificate authority, the identity certificate being bound to user terminal hardware, a processor coupled to the receiver to authenticate the user terminal using the identity certificate [Fig. 1B, col. 9 lines 49-55, col. 7 lines 58-64, Fig. 5B, col. 12 lines 29-37].

Mauro teaches: receive a message after receiving the authenticator message [Fig. 7 – 742,744, col. 13 lines 57-62].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Mauro with Hind, since one would have been motivated to provide secure transaction for a wireless communication devices [Mauro, col. 1 lines 60-62].

Mauro does not expressively mention a registration message.

Steflk teaches: receive a registration message [Fig. 16, col. 27 lines 10-33]. Further, Steflk teaches sending a message to the user terminal in response to the registration message [Fig. 16].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Steflk with Hind and Mauro, since one would have been motivated to establish secure communication channel between devices using transaction protocol [Steflk, col. 4 lines 4-5].

Steflk doesn't expressively mention session certificate.

Butt teaches sending session certificate to the terminal [col. 4 lines 1-2].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Butt with Hind, Mauro and Steflk, since one would have been motivated to provide remote access to manageable devices across heterogeneous environments [Butt, col. 1 lines 7-9].

As per claims 12 and 13, the rejection of claim 11 is incorporated and Hind teaches:

the user, wherein the identity certificate includes a serial number of the user terminal wherein the serial number comprises a Media Access Control (MAC) address of the user terminal [col. 7 lines 57-60].

As per claim 14, the rejection of claim 11 is incorporated and Hind teaches:

wherein the identity certificate is factory seeded into the memory of the user terminal [col. 13 lines 8-9].

7. Claims 15, 16, 18-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hind et al (US Patent No. 6,823,454) in view of Coulier (US Pub. No. 2002/0166048).

As per claim 15, Hind teaches a digital certificate to be seeded into a user terminal capable of communicating with a wireless access network, the certificate comprising: a serial number of the user terminal; an identification of a certificate authority that signs the certificate; and a signature of the identified certificate authority [fig. 3 and associated text, col. 11, lines 1-16 discloses the format of a representative digital certificate where the certificate has number of fields including device identifier, the identifier of the creator (issuer), and the a digital certificate of the certificate signature].

Coulier teaches:

wherein the certificate is scrambled with an authenticator string generated by an access point [Fig. 4, 411, 412].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Coulier with Hind, since one would have been motivated to establish the secure connection [Coulier, paragraph 0007 lines 1-2].

As per claim 16, the rejection of claim 15 is incorporated and Hind teaches:

wherein the serial number comprises a Media Access Control (MAC) address of the user terminal [col. 11, lines 46-54 and col. 6, lines 29-32, see also Fig. 1B and associated text].

As per claim 18, Hind teaches authenticating a user terminal of a wireless access network using an identity certificate signed by a certificate authority, the identity certificate being bound to user terminal hardware [fig. 3 and associated text, col. 11, lines 1-16 discloses the format of a representative digital certificate where the certificate has number of fields including device identifier, the identifier of the creator (issuer), and the a digital certificate of the certificate signature].

Coulier teaches:

scrambled with an authenticator string generated by an access point [Fig. 4, 411, 412].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Coulier with Hind, since one would have been motivated to establish the secure connection [Coulier, paragraph 0007 lines 1-2].

As per claims 19 and 20, the rejection of claim 18 is incorporated and Hind teaches:

the user, wherein the identity certificate includes a serial number of the user terminal wherein the serial number comprises a Media Access Control (MAC) address of the user terminal [col. 11, lines 46-54 and col. 6, lines 29-32, see also Fig. 1B and associated text].

As per claim 22, the rejection of claim 18 is incorporated and Hind teaches:

wherein the identity certificate is factory seeded into the memory of the user terminal [col. 10, lines 8-25, where creating device certificate using globally –unique device identifier for a particular device and storing the private key associated with the device

certificate for a device in a non-removable protected storage attached to the physical device are taught].

8. Claims 17 and 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hind (US Patent No. 6,823,454), in view of Coulier (US Pub. No. 2002/0166048) and further in view of US 2004/0005878 to Olin et al. (hereinafter "Olin").

However, in an analogous art, Olin teaches an access point for mobile devices with wireless communication capacity comprising communication means for establishing communications with at least one or more access points in order to form a network between at least access points (Abstract).

Olin teaches (paragraph 0041) teaches when a user of mobile device wants to connect to an access point, the identity of the user has first to be authenticated and that (paragraphs 0035-0036, Fig 1 and associated text) a mobile device connect to one of the access points with any type of wireless connection and that the mobile device connects to the first access point using wireless LAN. Then, the access point establishes a path to a gateway by tunneling using authorization protocols, such as certificates and digital signatures.

Therefore, it would have been obvious to one of ordinary skill in the art to modify the method and system of Hind with the teachings of Olin to allow authenticating the user of mobile device to multiple access points in order to form a private network and to enable mobile devices to establish connection to a gateway directly from one access

point or indirectly through other access points of the access point network (paragraph 0009).

Response to Amendment

9. Applicant has amended claims 1, 11, 15, 18, which necessitated new ground of rejection.

In view of applicant's argument regarding to amended independent claims 1, 11, 15, 18, new references are found. See new grounds of rejection above.

Independent claim 6 are neither amended as amended claims 1, 11, 15 and 18 nor argued expressively in the presented remark filed on 8/27/07. Therefore, the previous rejection is maintained as above.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nirav Patel whose telephone number is 571-272-5936. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

NBP
11/17/07

KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100